

ABSTRACT

Using a time when a transformer voltage  $V_t$  inverts due to a rectifier diode ( $D_{s1}$ ) entering a non-conducting state as a trigger, a first switching control circuit (CNT1) turns on a first switching element (Q1) after a predetermined delay time passes. A second switching control circuit (CNT2) turns on a second switching element (Q2) using a time when the transformer voltage  $V_t$  inverts due to turning off of the first switching element (Q1) as a trigger. A third switching control circuit (CNT3) turns on a third switching element (Q3) using turning off of the second switching element (Q2) as a trigger. (CNT1) determines a period  $ton1$  of the first switching element (Q1) such that a first output voltage  $Vo1$  is set to a predetermined value. (CNT2) determines an ON-period  $ton2$  of the second switching element (Q2) such that a second output voltage  $Vo2$  is set to a predetermined value. (CNT3) determines an ON-period  $ton3$  of the third switching element (Q3) such that a third output voltage  $Vo3$  is set to a predetermined value.